

CLAIMS

1. A hub unit having a sensor and comprising a hub unit having a wheel-side raceway member for a wheel connectable thereto, a body-side raceway member to be attached to a vehicle body and two rows of rolling bodies arranged between the two raceway members, and a sensor device provided on the hub unit, the body-side raceway member having a cylindrical portion and a flange portion provided with an insertion hole for a bolt for fastening the hub unit to the vehicle body, the hub unit being characterized in that the sensor device has a sensor for detecting the amount of deformation of the flange portion of the body-side raceway member and processing means for determining a ground contact load from the output of the sensor.
2. A hub unit having a sensor according to claim 1 wherein the flange portion of the body-side raceway member has a base end part provided with a curved surface, and the sensor is a strain sensor provided on the base end part having the curved surface.
3. A hub unit having a sensor according to claim 1 wherein the sensor is a displacement sensor supported by a support member fixed to one of the cylindrical portion of the body-side raceway member and the flange portion thereof for detecting the distance between the displacement sensor and the other portion.
4. A hub unit having a sensor according to claim 3 wherein the displacement sensor is a magnetic sensor provided on a forward end of the support member for detecting variations in the distance from the displacement sensor to an outer periphery

of the cylindrical portion of the body-side raceway member, and a magnetized portion is provided on the other portion of the body-side raceway member which portion is not provided with the support member, at a location opposed to the sensor.

- 5 5. A hub unit having a sensor according to claim 3 wherein the displacement sensor is a displacement sensor of the inductance type provided on a forward end of the support member for detecting variations in the distance from the displacement sensor to the other portion of the body-side raceway member
- 10 which portion is not provided with the support member.